

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

\_\_\_\_

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/053,467	11/07/2001	Hiroshi Inoue	09792909-5258	3706
26263 7590 02/06/2008 SONNENSCHEIN NATH & ROSENTHAL LLP P.O. BOX 061080			EXAMINER	
			WILLS, MONIQUE M	
	CKER DRIVE STATION, SEARS TOWER CAGO, IL 60606-1080		ART UNIT	PAPER NUMBER
			1795	
		•		
			MAIL DATE	DELIVERY MODE
			02/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/053,467	INOUE ET AĽ.				
Office Action Summary	Examiner	Art Unit				
	Monique M. Wills	1795				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 14 Au	<u>ıgust 2007</u> .					
· <u> </u>	,					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>1,2,4-7,9-12,14-19 and 21-31</u> is/are pending in the application.						
4a) Of the above claim(s) <u>1,2,4,5,14-19 and 21-23</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
	☑ Claim(s) <u>6,7,9-12 and 24-31</u> is/are rejected.					
· _	<u></u>					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner	r.					
10)⊠ The drawing(s) filed on <u>07 October 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correcti	• • • • • • • • • • • • • • • • • • • •					
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign a)⊠ All b)□ Some * c)□ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	4) MI Interview Summary	(DTO 440)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	(PTO-413) ite					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P					

Art Unit: 1795

#### **DETAILED ACTION**

# Response to Amendment

This Office Action is responsive to the Amendment filed August 14, 2007. The rejection of claim 32 under 35 U.S.C. 112 second paragraph is overcome. However, claims 6, 9-12, 24-31 are rejected under 103(a) as being obvious over Matsubara et al. U.S. Patent 6,797,434. The rejection is as follows:

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6,7, 9-12, 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over over Matsubara et al. U.S. Patent 6,797,434.

Matsubara teaches a negative active material for a rechargeable lithium battery comprising a metal of one or more of Sn, Iron, Lead, Silicon, Indium and Copper. See column 3, lines 10-20. The negative electrode also includes a carbonaceious material capable of being doped and undoped with lithium. See column 3, lines 30-45. The

carbonaceous material is graphite. See column 3, lines 32-35. The C alament is lead or indium. See column 3, lines 10-20.

Page 3

Matsubara does not expressly disclose the weight percents of claim 6 and 25-29 where A-B-C contains 5 to 40% by weight of second element B and 1 to 5-% by weight of the third element C.

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ instant percent ranges, since it has been held that discover an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The skilled artisan recognizes the varying the amounts of active components directly effects the storage capacity and cycle life of the electrode.

## Response to Arguments

Applicant's arguments with respect to claim 32 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

Application/Control Number: 10/053,467

Art Unit: 1795

Page 4

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's

supervisor, Patrick Ryan, may be reached at 571-272-1292. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov.Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

1/28/08